



## SLANT BED CNC LATHES

**AVIAturn35**

**AVIAturn50**

**AVIAturn63**





## Fabryka Obrabiarek Precyzyjnych

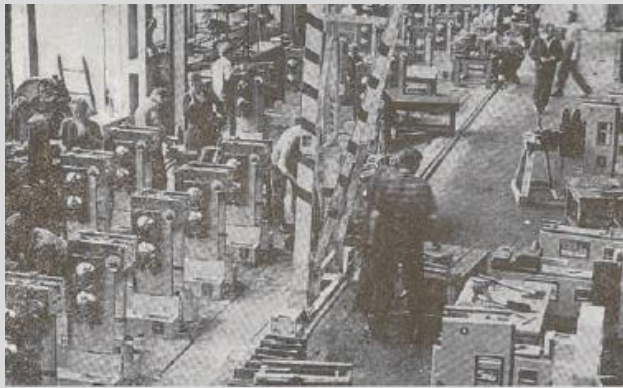
**AVIA S.A.**

### ABOUT US ...

Fabryka Obrabiarek Precyzyjnych AVIA S.A. Warsaw, Poland (Machine Tool Factory AVIA S.A.) was founded in 1902 and is one from the oldest Polish industrial plants. For the past 70 years, AVIA has been one of the leading Polish manufacturers of high-quality, precision machine tools. Today, our brand is widely recognized in Europe, especially in Germany, where we have over 4,500 installations.

The presence of machine tools manufactured by us in demanding and industrialized markets ensures constant and continuous growth of production and increases the competitiveness of our customers. Proven AVIA machine solutions, depending on favourable prices, are also successfully featured in emerging markets in Eastern Europe.

At present, AVIA offers in its product line Vertical machining centres 3, 4 and 5-axis, CNC and Manual universal milling machines and CNC inclined bed lathes. AVIA is also a manufacturer of key components for machine tools such as: spindles or precision ball screws. We supply ball screws to some of the world's leading machine tool manufacturers.



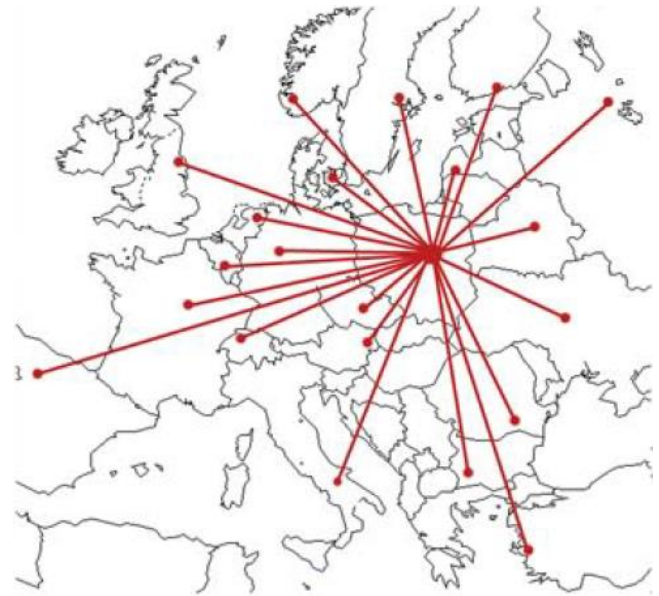
Assembly line AVIA – Manual Universal Milling Machines - 1970

Company management and production:

**FABRYKA OBRABIAREK PRECYZYJNYCH AVIA S. A.**

Siedlecka 47  
03-768 Warsaw  
Poland

+48 22 818 62 11  
market@avia.com.pl  
www.avia.com.pl



New machine designs are based on our own development and research department. The unique combination of very talented young engineers and very experienced designers who have worked at AVIA for many years ensures an ideal environment for development and research processes. Design proposals are created by computer systems such as:

- Solid Modelling Design (CAD-3D),
- Finite Element Method optimization,
- Computer Aided Manufacturing (CAM).

Our goal is not only to develop the latest technologies and deliver them to customers, but also to provide adequate training, service and maintenance of machines, as well as the availability of spare parts for many years after the machine has been handed over.

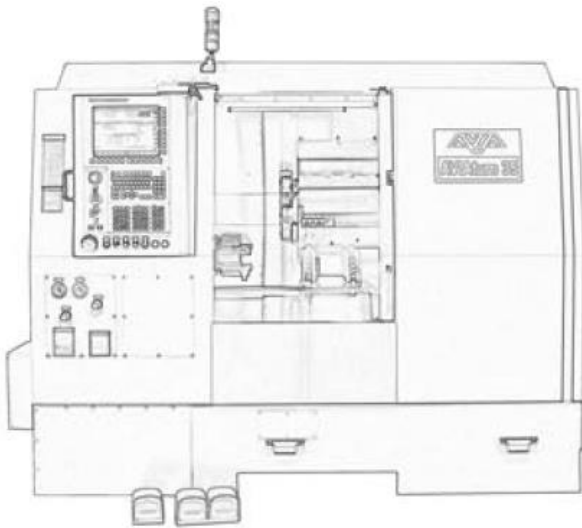
sales representation

**PILART s. r. o.**

Ericha Roučky 11  
678 01 Blansko  
Czech Republic

+420 739 510 561  
info@avia-cnc.cz  
www.avia-cnc.cz

# DISCOVER WIDE RANGE OF PRECISION SLANT BED CMC LATHES OF AVIA

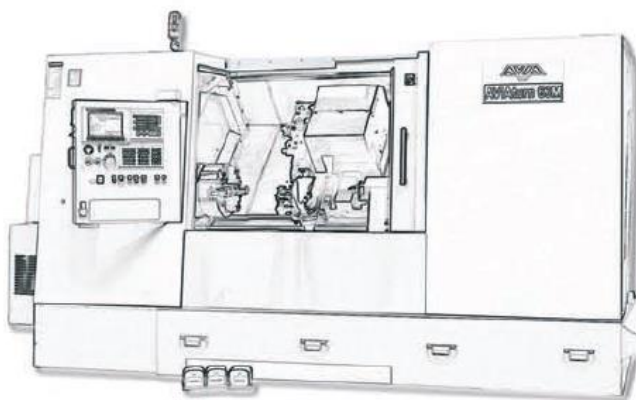
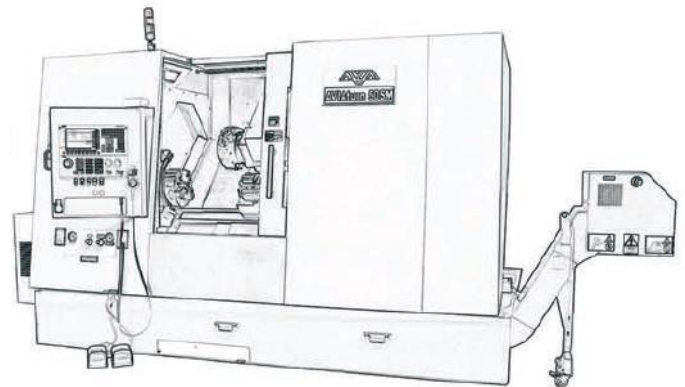


## AVIAturn35 SERIES

- modern and versatile CNC lathes are characterized by high dynamics and fast machining
- extra rigidity is achieved thanks to good ribbing from one piece of cast base
- 12 tool positions on the rotary magazine VDI 30 or BMT 55 provide the shortest replacement time
- The tailstock with automatic travel and a diameter of 77 mm enables more efficient work for a wider range of turning
- combination of power and torque with modern CNC control for higher production and accuracy
- the use of AVIA ground ball screws with pre-tensioned nuts guarantees positioning accuracy and long-term maintenance-free operation

## AVIAturn50 SERIES

- modern slant bed CNC lathes designed for demanding and efficient production purposes, ensures high rigidity during rough machining
- fully enclosed workspace for chip less work environments - stainless steel internal covers
- rigidity tailstock travel performed by precision ground ball screw and motor with brake
- well ribbed cast iron base cast in one piece and optimized by the FEM method ensures high rigidity during roughing
- 12 tool positions with VDI40 or BMT65 actuators
- digital axial axis motors and servomotors bring high accuracy and dynamics of operation



## AVIAturn63 SERIES

- extraordinarily rigid one-piece iron casting base guarantees stability during heavy machining and roughing
- spacious workplace allows machining of large workpieces up to a length of 2500 mm
- performance solution for rough and high-performance turning with a torque of up to 1266 Nm
- digital axis motors and servomotors deliver high accuracy and traffic dynamics
- CNC lathe is equipped with a rotating magazine for 12 tools VDI 50 or BMT 75 for larger tool applications
- roller type linear guideways with extra rigidity positively affect the stability and turning performance of large diameter workpieces



special index chuck SMW  
AXN adjustable in 4  
positions



Extractor - for extracting the  
workpiece from the spindle



Cut off parts catcher for  
automatic parts  
collection



Automatic tool  
probe



Hydraulic steady rest for long  
rods and shafts



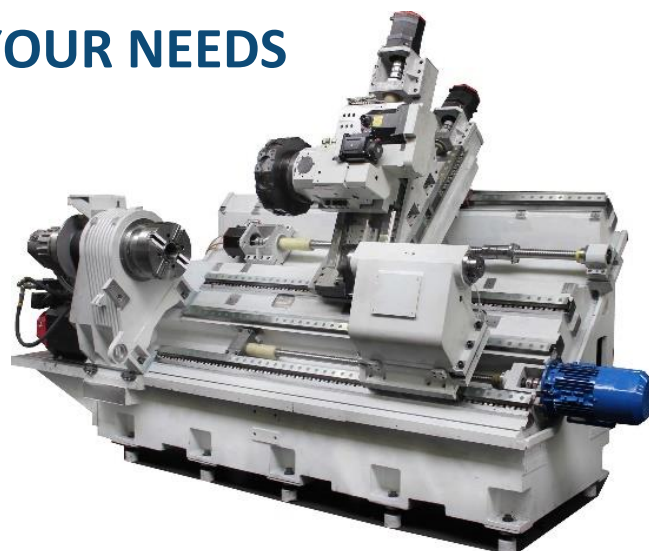
Stainless steel line  
covers

# DISCOVER SLANT BED CNC LATHES DESIGNED TO YOUR NEEDS

## HIGH CLASS CNC SYSTEMS

Modern CNC control system FANUC Oi-TF with the highest reliability on the market. Conversation program options Manual Guide i. Many interface ports (RS 232, PCMCIA, Ethernet) allow communication with CNC control. Available FANUC Oi-TF simulation system running on a PC or laptop.

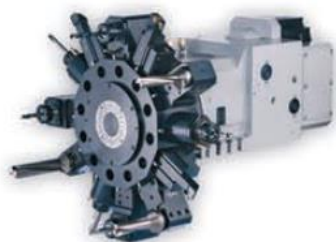
Siemens SINUMERIK 828D new CNC system guarantees high work efficiency with the ShopTurn 3D Dialog option. A large number of interface ports (RS 232, USB, PCMCIA, Ethernet) enable communication with CNC control. Maintenance-free operation thanks to NV-RAM technology - hard disk without the need for batteries.



## RELIABILITY KEY COMPONENTS



A well-ribbed machine base is always cast in one piece together with the machine bed in order to maintain the appropriate rigidity, good vibration damping, thermal and dimensional stability. The contact surfaces for the linear guide are precisely ground on a Waldrich-Coburg surface grinder for ideal adhesion, high rigidity and geometric stability. The machine is tilted by 35 to 45 °, which provides very good conditions for trouble-free chip removal.

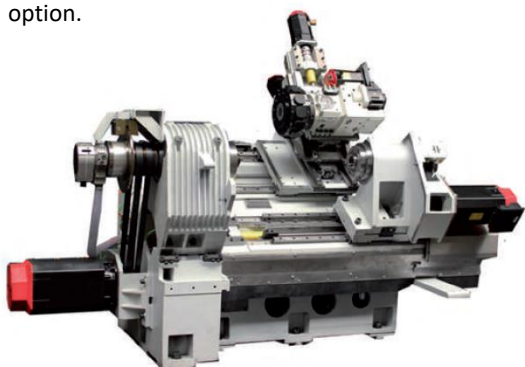


AVIA Class C3 precision ball screws with preloaded double nut are used to achieve excellent positioning accuracy and prevent backlash. Our solution is characterized by a long service life without the need for service interventions. Very high accuracy is ensured by a fully digital CNC servo system in combination with direct mechanical drives (without belt) connected with pre-tensioned double ball screws.

The maintenance-free roller linear guide enables high-speed rapid traverses, high accuracy and prevents the "stick-slip" effects (contamination of the guide surfaces) that are characteristic of square guides. Linear guidance is always more stable and stiffer over a wider range. Electrical components from well-known and reliable suppliers that are CE-compliant and easily available on the market for maintenance purposes.

## 12 STATION SERVO TURRETS WITH VDI AND BMT TOOLING DISC

AVIAturn lathes use the popular VDI tool holders for the fastest possible tool change and maximum rigidity while turning as efficiently as possible. BMT tool holders with higher repeatability and rigidity are also available as an option.



## OPTIONAL EQUIPMENT

- automatic tool probe - for fast and automatic tool measurement
- chip conveyor - trouble-free chip removal
- oil mist extractor
- hydraulic support - supports long rods and shafts
- collet chuck - necessary for working with bars
- blade for automatic removal of the workpiece without the need to interrupt turning
- automatic bar feeder - feeds the bar with a spindle - necessary for series production

## „Y“AXIS FUNCTIONALITY AVAILABLE FOR AVIAturn 35/50/63 SERIES

- the Y axis is realized by means of an additional wedge support and displacements in the X1 and X2 axes
- greater rigidity and accuracy compared to the axial recess



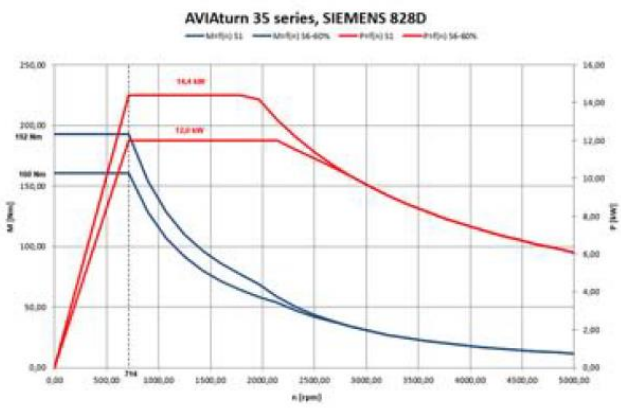
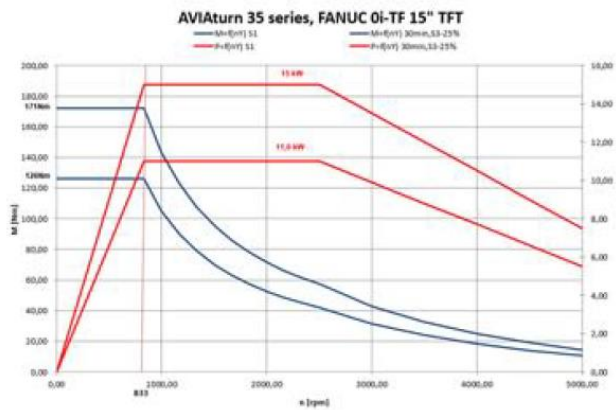
# AVIAturn 35

dynamics  
rigidity  
modernity



## AVIAturn 35

- modern and versatile CNC lathes are characterized by high dynamics and fast machining
- extra rigidity is achieved thanks to ell ribbed base of one piece iron casting
- 12 tool positions on the rotary magazine VDI 30 or BMT 55 provide the shortest replacement time
- tailstock with automatic travel and a diameter of 77 mm enables more efficient work for a wider range of turning
- combination of power and torque with modern CNC control for higher production and accuracy
- the use of AVIA ball screws with pre-tensioned nuts guarantees positioning accuracy and long-term maintenance-free operation



| Technical Data                               |      | AVIAturn 35   | AVIAturn 35M /<br>AVIAturn 35MY     | AVIAturn 35SM /<br>AVIAturn 35SMY       |          |
|--|------|---|-------------------------------------|---|----------|
| <b>WORKING AREA:</b>                         |      |   |                                     |   |          |
| Diameter above the bed                       | mm   | 560   | 560                                 | 560                                     |          |
| Diameter over support                        | mm   | 350   | 350                                 | 350                                     |          |
| Turning length                               | mm   | 600   | 580                                 | 580                                     |          |
| Diameter for bars                            | mm   | 65  | 65                                  | 65                                      |          |
| <b>SPINDLE:</b>                              |      |   |                                     |   |          |
| Spindle                                      | type | A2-6  | A2-6                                | A2-6                                    | A2-5     |
| Spindle speed                                | rpm  | 5000  | 5000                                | 5000                                    | 6000     |
| 3-jaw chuck                                  | mm   | 210   | 210                                 | 210                                     | 169      |
| Spindle bore                                 | mm   | 75,5  | 75,5                                | 75,5                                    | -        |
| Spindle motor power S1 / S6 (40%) *          | kW   | 11 / 15   | 11 / 15                             | 11 / 15                                 | 7,5 / 11 |
| Spindle torque S1 / S6 (40%) *               | Nm   | 126 / 171   | 126 / 171                           | 126 / 171                               | 45 / 60  |
| <b>FEEDS:</b>                                |      |   |                                     |   |          |
| X-axis feed                                  | mm   | -10 / 210   | -60 / 180 (M)<br>-55 / 185 (MY)     | -10/180                                 |          |
| Z / Z2 axis feed                             | mm   | 610 / -   | 600 / -                             | 600 / 520                               |          |
| Y-axis feed                                  | mm   | -   | - / ±50                             | - / ±50                                 |          |
| X / Z / Z2 rapid traverse                    | m/mm | 25 / 30 / -   | 25 / 30 / - (M)<br>25 / 30 / - (MY) | 25 / 30 / 30 (SM)<br>25 / 30 / 30 (SMY) |          |
| <b>TURRET:</b>                               |      |   |                                     |   |          |
| Number of stations / active stations         | pcs  | 12 / -  | 12 / 12                             | 12 / 12                                 |          |
| Type of instruments / options                | type | VDI 30 / BMT 55   | VDI 30 / BMT 55                     | VDI 30 / BMT 55                         |          |
| Tool size                                    | mm   | 20 x 20 / 25x25   | 20 x 20 / 25x25                     | 20 x 20 / 25x25                         |          |
| Tool diameter                                | mm   | 32 / 40   | 32 / 40                             | 32 / 40                                 |          |
| Speed of SIEMENS / FANUC driven tools        | rpm  | -   | 5 000 / 5 000                       | 5 000 / 5 000                           |          |
| Motor power of SIEMENS / FANUC driven tools  | kW   | -   | 4,8 / 4,5                           | 4,8 / 4,5                               |          |
| SIEMENS / FANUC driven tools torque          | Nm   | -   | 20 / 18                             | 20 / 18                                 |          |
| <b>TAILSTOCK:</b>                            |      |   |                                     |   |          |
| Travel                                       | mm   | 500   | 500                                 | -                                       |          |
| Axial force                                  | N    | 5000  | 5000                                | -                                       |          |
| Tailstock cone                               | MK   | 5   | 5                                   | -                                       |          |
| Feed method                                  |      | hydraulic cylinder  | Hydraulic cylinder                  | -                                       |          |
| <b>CNC CONTROL:</b>                          |      |   |                                     |   |          |
| FANUC (standard)                             | type | 0i-TF   | 0i-TF                               | 0i-TF                                   |          |
| SIEMENS (optional)                           | type | 828D  | 828D                                | 828D                                    |          |
| <b>GENERAL INFORMATION:</b>                  |      |   |                                     |   |          |
| Dimensions: L x W x D                        | mm   | 2860x1660x2120  | 2860x1660x2120                      | 3060x1660x2120                          |          |
| Weight cca                                   | kg   | 3850  | 3900                                | 4200                                    |          |
| Total power consumption *                    | kVA  | 24  | 26/29                               | 38 / 40                                 |          |
| * For CNC system FANUC                       |      |   |                                     |   |          |
| <b>STANDARD:</b>                             |      |   |                                     |   |          |
| Digital servo axes and spindle               |      | 12 VDI 30 revolver stations                                 |                                     |   |          |
| 3-jaw chuck 210 mm, hydraulic, self-centring |      | Automatic lubrication system for ball screws and guides     |                                     |   |          |
| Set of hard and soft jaws                    |      | Cooling system with coolant supply through the tool carrier |                                     |   |          |
| Through spindle                              |      | Electronic hand wheel                                       |                                     |   |          |
| Linear guidance on the X and Z axes          |      | Fully enclosed workspace with lighting                      |                                     |   |          |
| Telescopic stainless steel line covers       |      | Ethernet. PCMCIA, RS 232, USB (SIEMENS only)                |                                     |   |          |
| Ball screws with double pre-tensioned nut    |      | Instructions for use and programming                        |                                     |   |          |
| <b>options:</b>                              |      |   |                                     |   |          |
| Hydraulic tailstock                          |      | Automatic bar feeder  |                                     |   |          |
| Tool probe                                   |      | Oil mist collection   |                                     |   |          |
| Chip conveyor                                |      | Oil separator   |                                     |   |          |
| Additional soft jaws for the chuck           |      | Tool holders  |                                     |   |          |
| Paddle                                       |      | CAD / CAM software  |                                     |   |          |
| Self-centring 3-jaw chuck 250 mm, hydraulic  |      | Coolant gun for work and cleaning                           |                                     |   |          |



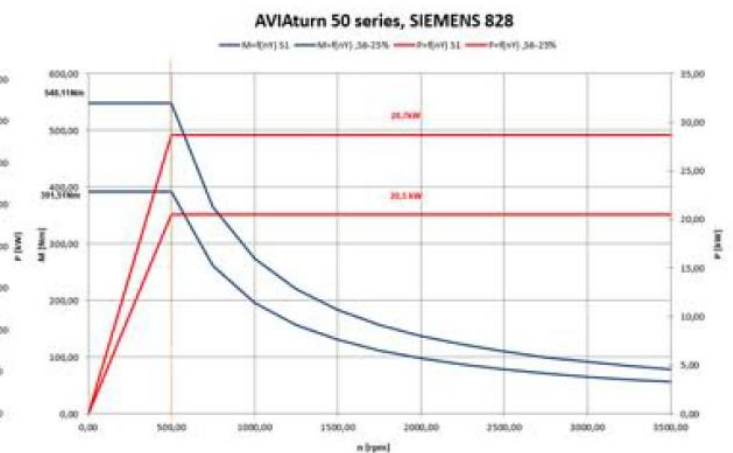
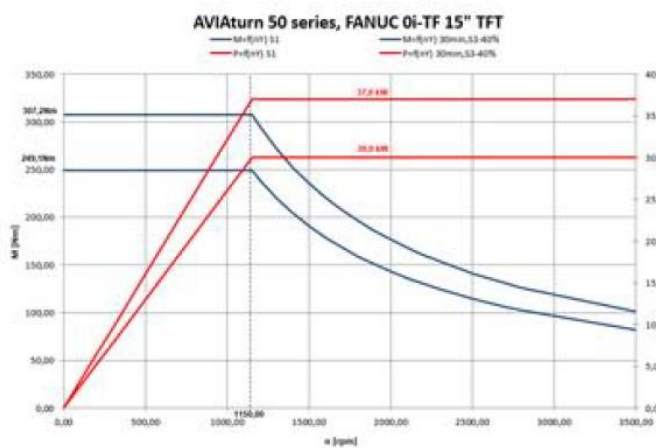
# AVIAturn 50

built in  
accordance with  
the most up to  
date design trends



## AVIAturn 50

- modern Slant bed CNC lathes designed for demanding and efficient production purposes high rigidity during roughing
- fully enclosed workspace for chipless work environments - stainless steel internal covers
- rigid tailstock travel performed by precision ground ball screw and a motor with brake
- well ribbed one-piece cast base optimized by FEM method ensures high rigidity during roughing
- 12 tool positions with VDI40 or BMT 65 actuators
- digital axial axis motors and servomotors bring high accuracy and dynamics of operation





| Technical Data                              |      | AVIAturn 50   | AVIAturn 50M /<br>AVIAturn 50MY          | AVIAturn 50 SM /<br>AVIAturn 50SMY          |                    |
|---|------|---|--|---|--------------------|
| <b>WORKING AREA:</b>                        |      |   |  |   |                    |
| Diameter above the bed                      | mm   | 700   | 700                                      | 700   |                    |
| Diameter over support                       | mm   | 500/445   | 500/445                                  | 500/445                                     |                    |
| Turning length                              | mm   | 800   | 800                                      | 800   |                    |
| Diameter for bars                           | mm   | 80  | 80                                       | 80  |                    |
| <b>SPINDLE:</b>                             |      |   |  |   |                    |
|   |      |   |  | <b>SPINDLE</b>                              | <b>SUB-SPINDLE</b> |
| Spindle                                     | type | A2-8  | A2-8                                     | A2-8  | A2-6               |
| Spindle speed                               | rpm  | 3500  | 3500                                     | 3500  | 5000               |
| 3-jaw chuck                                 | mm   | 315   | 315                                      | 315   | 210                |
| Spindle bore                                | mm   | 93  | 93                                       | 93  | -                  |
| Spindle motor power S1 / S6 (40%) *         | kW   | 30/37   | 30/37                                    | 30/37                                       | 17/26              |
| Spindle torque S1 / S6 (40%) *              | Nm   | 391/548   | 391/548                                  | 391/548                                     | 115/160            |
| <b>FEEDS:</b>                               |      |   |  |   |                    |
| X-axis feed                                 | mm   | -10/360   | -60/300 (M)<br>-20/290 (MY)              | -5/280                                      |                    |
| Z / Z2 axis feed                            | mm   | 830/-   | 830/-                                    | 830/690                                     |                    |
| Y-axis feed                                 | mm   | -   | -/±65                                    | -/±65                                       |                    |
| X / Z / Z2 rapid traverse                   | m/mm | 24/24/-   | 24/24/-                                  | 24/24/24                                    |                    |
| <b>TURRET:</b>                              |      |   |  |   |                    |
| Number of stations / active stations        | pcs  | 12/-  | 12/12                                    | 12/12                                       |                    |
| Type of instruments / options               | type | VDI 40 / BMT 65   | VDI 40 / BMT 65                          | VDI 40 / BMT 65                             |                    |
| Tool size                                   | mm   | 25x25   | 25x25                                    | 25x25                                       |                    |
| Tool diameter                               | mm   | 40  | 40                                       | 40  |                    |
| Speed of SIEMENS / FANUC driven tools       | rpm  | -   | 4000/4000                                | 4500/4000                                   |                    |
| Motor power of SIEMENS / FANUC driven tools | kW   | -   | 4,2/5,5                                  | 4,2/5,5                                     |                    |
| SIEMENS / FANUC driven tools torque         | Nm   | -   | 28/30                                    | 28/30                                       |                    |
| <b>TAILSTOCK:</b>                           |      |   |  |   |                    |
| Travel                                      | mm   | 680   | 680                                      | -   |                    |
| Axial force                                 | N    | 15 000  | 15 000                                   | -   |                    |
| Quill diameter                              | mm   | 110   | 110                                      | -   |                    |
| Quill travel (hydraulic)                    | mm   | 100   | 100                                      | -   |                    |
| Tailstock cone                              | MK   | 5   | 5  | -   |                    |
| Tailstock travel execution                  |      | el. motor + ball screw                                      | el. motor + ball screw                   | -   |                    |
| <b>CNC CONTROL:</b>                         |      |   |  |   |                    |
| FANUC (standard)                            | type | 0i-TF   | 0i-TF                                    | 0i-TF                                       |                    |
| SIEMENS (option)                            | type | 828D  | 828D                                     | 828D  |                    |
| <b>GENERAL INFORMATION:</b>                 |      |   |  |   |                    |
| Dimensions: L x W x D                       | mm   | 4050x2150x2370  | 4050x2150x2370(M)<br>4200x2150x2770 (MY) | 4050x2150x2370 (SM)<br>4200x2150x2770 (SMY) |                    |
| Weight cca                                  | kg   | 7000  | 7000 (M), 8000 (MY)                      | 7500 (SM), 8500 (SMY)                       |                    |
| Total power consumption *                   | kVA  | 42  | 48/51                                    | 2/65  |                    |
| * For CNC system FANUC                      |      |   |  |   |                    |
| <b>STANDARD:</b>                            |      |   |  |   |                    |
| Digital axis and spindle actuators          |      | Tailstock with hydraulic quill                              |  |   |                    |
| Self-centring 3-jaw hydraulic chuck 315 mm  |      | Automatic lubrication system for ball screws and guides     |  |   |                    |
| Set of soft and hard jaws                   |      | Cooling system with coolant supply through the tool carrier |  |   |                    |
| Through spindle                             |      | Electronic hand wheel                                       |  |   |                    |
| Linear guidance on the X and Z axes         |      | Fully enclosed workspace with lighting                      |  |   |                    |
| Telescopic stainless steel line covers      |      | Ethernet. PCMCIA, RS 232, USB (SIEMENS only)                |  |   |                    |
| Ball screws with double pre-tensioned nut   |      | Instructions for use and programming                        |  |   |                    |
| <b>OPTIONS:</b>                             |      |   |  |   |                    |
| Hydraulic steady rest                       |      | Automatic bar feeder  |  |   |                    |
| Tool probe                                  |      | Oil mist collection   |  |   |                    |
| Chip conveyor                               |      | Oil separator   |  |   |                    |
| Additional soft jaws for the chuck          |      | Tool holders  |  |   |                    |
| Cut off parts catcher with container        |      | CAD / CAM software  |  |   |                    |
| Collet chuck                                |      | More on request   |  |   |                    |



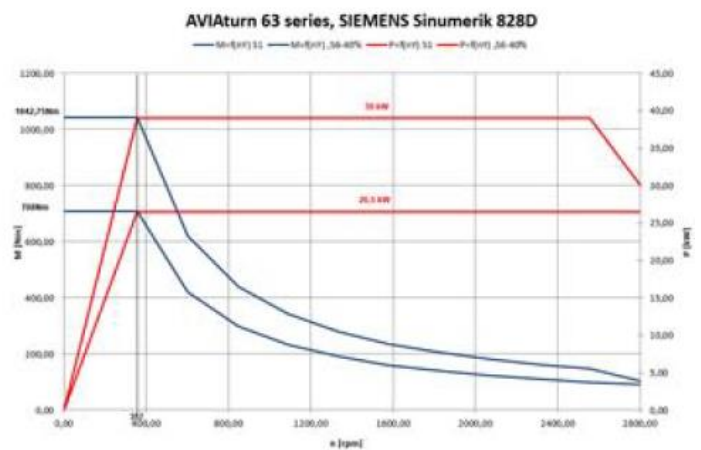
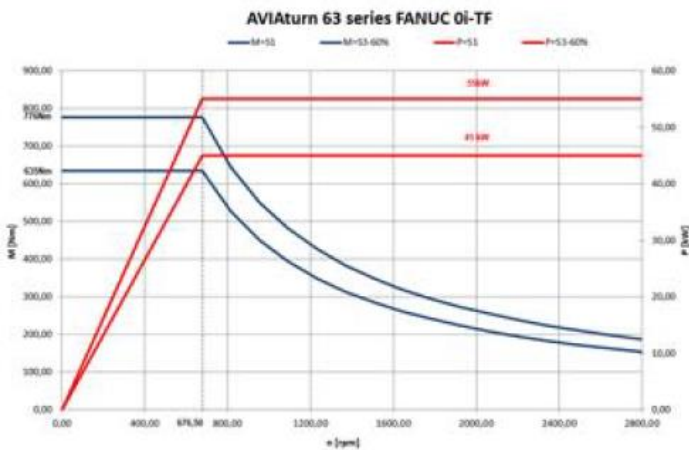
# AVIAturn 63

high performance  
lathes for most  
demanding  
applications

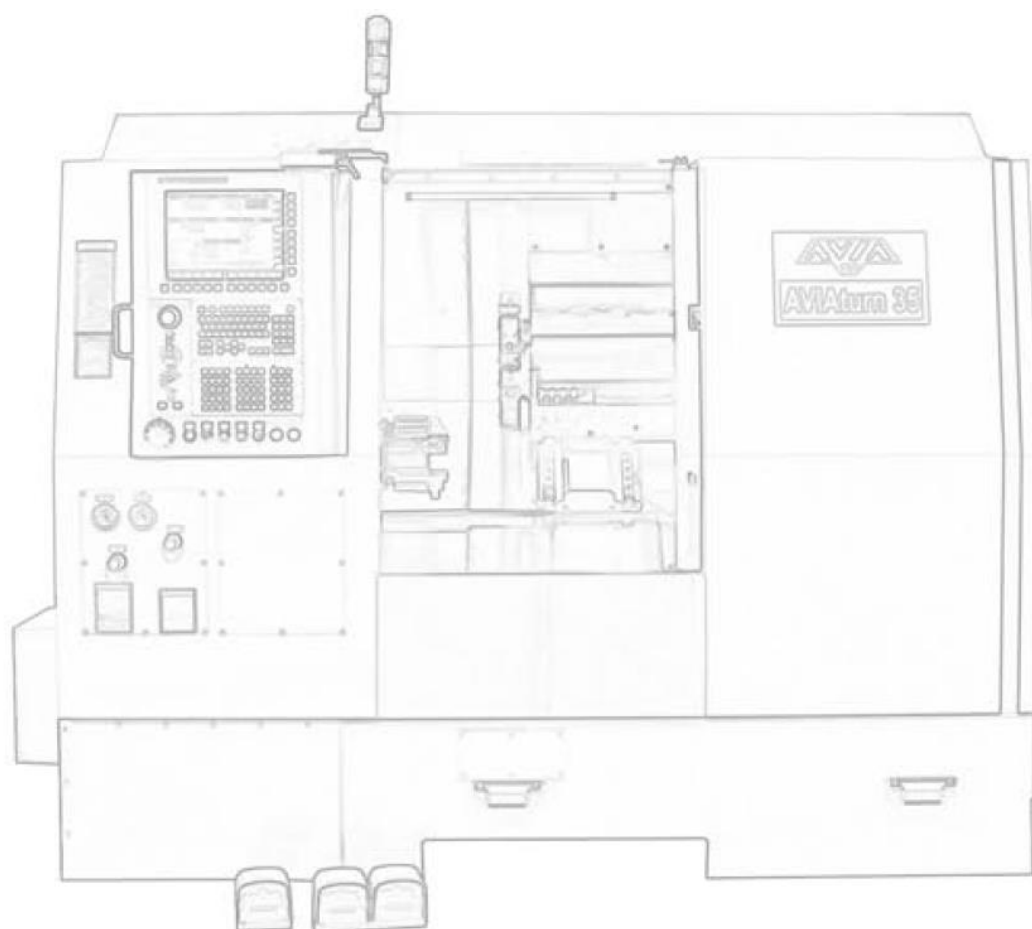


## AVIAturn 63

- extraordinary rigid one-piece iron casting base guarantees stability during heavy machining and roughing
- spacious workplace allows machining of large workpieces up to a length of 2500 mm
- perfect solution for rough and high-performance turning with a torque of up to 1266 Nm
- digital axis motors and servomotors bring high accuracy and dynamics of operation
- CNC lathe is equipped with a rotating magazine for 12 tools VDI 50 or BMT 75 for larger tool applications
- roller linear guideways with exceeded rigidity positively affect the stability and turning performance of large diameter workpieces



| Technical Data                           |      | AVIAturn 63             | AVIAturn 63M  | AVIAturn 63MY / AVIAturn 63MYL | AVIAturn 63L / AVIAturn 63ML |
|--|------|-------------------------|---|--------------------------------|------------------------------|
| <b>WORKING AREA:</b>                     |      |                         |   |                                |                              |
| Diameter above the bed                   | mm   | 770                     | 770   | 770                            | 770                          |
| Diameter over support                    | mm   | 630/445                 | 630/445   | 580/445                        | 630/550                      |
| Turning length                           | mm   | 1400                    | 1400  | 1400 / 2500                    | 2500                         |
| Diameter for bars (options)              | mm   | 90<br>(112/135/150)     | 90<br>(112/135/150)   | 90<br>(112/135/150)            | 112<br>(135/150)             |
| <b>SPINDLE:</b>                          |      |                         |   |                                |                              |
| Spindle (options)                        | type | A2-8<br>(A2-11 / A2-15) | A2-8<br>(A2-11 / A2-15)                                     | A2-8<br>(A2-11 / A2-15)        | A2-11<br>(A2-15)             |
| Spindle speed                            | rpm  | 2800                    | 2800  | 2800                           | 1800                         |
| 3-jaw chuck                              | mm   | 400                     | 400   | 400                            | 400                          |
| Spindle bore (options)                   | mm   | 105<br>(131/155/178)    | 105<br>(131/155/178)  | 105<br>(131/155/178)           | 131<br>(155/178)             |
| Spindle motor power S1 / S6 (40%) *      | kW   | 45/55                   | 45/55   | 45/55                          | 45/55                        |
| Spindle torque S1 / S6 (40%) *           | Nm   | 860/1266                | 860/1266  | 860/1266                       | 860/1266                     |
| <b>FEEDS:</b>                            |      |                         |   |                                |                              |
| X-axis feed                              | mm   | -20/405                 | -40/385   | -20/310                        | -20/405 (L)<br>-40/385 (ML)  |
| Z / Z2 axis feed                         | mm   | 1440                    | 1440 / 2500   | 1440                           | 2500                         |
| Y-axis feed                              | mm   | -                       | -   | ±65                            | -                            |
| X / Z / Z2 rapid traverse                | m/mm | 24/24                   | 24/24   | 24/24                          | 24/24                        |
| <b>TURRET:</b>                           |      |                         |   |                                |                              |
| Number of stations / active stations     | pcs  | 12/-                    | 12/6  | 12/12                          | 12/-(L), 12/6(ML)            |
| Type of instruments / options            | type | VDI 50 / BMT 75         | VDI 50 / BMT 75   | VDI 40 / BMT 65                | DVI 50 / BMT 75              |
| Tool size                                | mm   | 32 x 32                 | 32 x 32   | 25 x 25                        | 32 x 32                      |
| Tool diameter                            | mm   | 50                      | 50  | 40                             | 50                           |
| Speed of SIEMENS / FANUC driven tools    | rpm  | -                       | 4 000 / 4 000   | 4 000 / 4 000                  | 4 000 / 4 000 (ML)           |
| Power of SIEMENS / FANUC driven tools    | kW   | -                       | 8,8/5,5   | 8,8/5,5                        | 8,8/5,5 (ML)                 |
| SIEMENS / FANUC driven tools torque      | Nm   | -                       | 50/40   | 50/30                          | 50/40 (ML)                   |
| <b>TAILSTOCK:</b>                        |      |                         |   |                                |                              |
| Travel                                   | mm   | 1150                    | 1150  | 1150                           | 2100                         |
| Axial force                              | N    | 15 000                  | 15 000  | 15 000                         | 47 000                       |
| Quill diameter                           | mm   | 110                     | 110   | 110                            | 165                          |
| Quill travel (hydraulic)                 | mm   | 100                     | 100   | 100                            | 120                          |
| Tailstock cone                           | MK   | 5                       | 5   | 5                              | 6                            |
| Tailstock travel execution               |      |                         | el. motor + ball screw                                      |                                |                              |
| <b>CNC CONTROL:</b>                      |      |                         |   |                                |                              |
| FANUC (standard)                         | type | 0i-TF                   | 0i-TF   | 0i-TF                          | 0i-TF                        |
| SIEMENS (option)                         | type | 828D                    | 828D  | 828D                           | 828D                         |
| <b>GENERAL DATA:</b>                     |      |                         |   |                                |                              |
| Dimensions: L x W x H                    | mm   | 4580 x 2150 x 2370      | 4580 x 2150 x 2370  | 4580x2150x2800                 | 5880x2340x2500               |
| Weight cca                               | kg   | 8500                    | 8500  | 9000                           | 12000(L), 13000(ML)          |
| Total power cca                          | kVA  | 49                      | 60  | 68                             | cca 49/60                    |
| <b>STANDARD:</b>                         |      |                         |   |                                |                              |
| Digital actuators for axes and spindle   |      |                         | Telescopic stainless steel line covers                      |                                |                              |
| 12 tool positions VDI 50                 |      |                         | Ball screws with double pre-tensioned nut                   |                                |                              |
| Only medium hydraulic 3-jaw chuck 400 mm |      |                         | Automatic lubrication system for ball screws and guides     |                                |                              |
| Tailstock with hydraulic quill           |      |                         | Cooling system with coolant supply through the tool carrier |                                |                              |
| Through spindle                          |      |                         | Electronic handwheel  |                                |                              |
| Set of soft and hard jaws                |      |                         | Fully enclosed workspace with lighting                      |                                |                              |
| Linear guidance on the X and Z axes      |      |                         | Ethernet. PCMCIA, RS 232, USB (SIEMENS only)                |                                |                              |
| <b>OPTIONS:</b>                          |      |                         |   |                                |                              |
| Hydraulic steady rest                    |      |                         | Collet chuck  |                                |                              |
| Tool probe                               |      |                         | Oil mist collection   |                                |                              |
| Chip conveyor                            |      |                         | Oil separator   |                                |                              |
| Additional soft jaws for the chuck       |      |                         | Tool holders  |                                |                              |
| Cut of parts catcher with container      |      |                         | CAD/CAM software  |                                |                              |



Company management and production:

**FABRYKA OBRABIAREK PRECYZYJNYCH AVIA S. A.**

Ul. Siedlecka 47  
03-768 Warsaw  
Poland  
+48 22 818 62 11  
market@avia.com.pl  
www.avia.com.pl

Sales representation:

**PILART s. r. o.**  
Ericha Roučky 11  
678 01 Blansko  
Czech Republic  
+420 739 510 561  
info@avia-cnc.cz  
www.avia-cnc.cz